AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A signal processing device, comprising:

a general-purpose signal processor formed of an assembly of plural component-processors~~, each of the component-processors being capable of operating under operating environments associated with software tasks independent of other component-processors; and~~;

a management processor ~~being capable of~~that configures connections for~~arbitrarily changing the operating environments of~~ each of the component-processors in accordance with a demand for signal processing,

wherein the management processor estimates a type of processing and an entire load of ~~the entire~~ processing, and determines, based on the estimation, a number of component-processors to operate, and ~~changes the operating environment of each of the component-processors~~ wherein said management processor configures connections of each of the component-processors and loads application programs into the component-processors.

2. (Original) The signal processing device as claimed in claim 1, further comprising an input/output interface for receiving a signal to be processed inputted from an external device or one of the component-processors, and for outputting a processed signal to the external device or one of the component-processors, wherein the management processor controls the input/output interface so as to swap one of the component-processors which receives the signal to be

processed which is inputted through the input/output interface or outputs the processed signal in accordance with a demand for signal processing.

3. (Previously Presented) The signal processing device as claimed in claim 2, wherein the input/output interface includes a cross bus switch that can selectively connect, under the control of the management processor, the external device to one of the component-processors, or the component-processors to each other.

4. (Previously Presented) The signal processing device as claimed in claim 2, wherein the input/output interface includes a multiple bus that can selectively connect, under the control of the management processor, the external device to one of the component-processors, or the component-processors to each other.

5. (Original) The signal processing device as claimed in claim 2, wherein a local memory is disposed on each of the component-processors, said local memory stores a signal to be processed or a signal processed result by the component-processors until the signal to be processed or the signal processed result becomes available to be outputted to the input/output interface.

6. (Original) The signal processing device as claimed in claim 2, wherein the general-purpose signal processor, the management processor and the input/output interface are disposed in a single case, the case including a first connection interface being connectable to a device that provides a demand for signal processing to the management processor, and a second connection

interface being connectable to the external device that delivers a signal with respect to the input/output interface.

7. (Currently Amended) An entertainment device, comprising:

a signal processing device including a general-purpose signal processor, a management processor and an input/output interface; and

a main processor that provides a demand for signal processing to the signal processing device,

wherein said general-purpose signal processor is formed of an assembly of plural component-processors,

wherein each of the component-processors ~~can~~ operate in parallel ~~under operating environments associated with software tasks~~ independent of other component-processors;

wherein the input/output interface inputs a signal to be processed from an external device or one of the component-processors, and outputs a processed signal to the external device or one of the component-processors,

wherein the management processor sets the operating environments ~~of~~ for each of the component-processors in accordance with a demand for signal processing which is provided from the main processor, and controls the input/output interface so as to swap one of the component-processors which receives the signal to be processed which is inputted through the input/output interface or outputs the processed signal in accordance with the demand for signal processing, and

wherein the management processor estimates a type of processing and an entire load of ~~the entire~~ processing, and determines based on the estimation a number of component-processors to operate, and changes the operating environment of each of the component-processors.

8. (Original) The entertainment device as claimed in claim 7, further comprising a network interface that enables a connection with a computer network, and a storage means that stores digital information readable by a computer, wherein the main processor controls the network interface to acquire the digital information from an external device, stores the acquired digital information in the storage means, and provides the stored digital information and a demand for signal processing based on the digital information to the management processor of the signal processing device to constitute operating environments for entertainment processing the contents of which are determined in accordance with the digital information.

9. (Original) The entertainment device as claimed in claim 8, wherein the main processor constructs the operating environments for entertainment processing on one or more of the component-processors through the management processor, and, after constructing the operating environments, said main processor reconstructs said operating environments to new operating environments upon receipt of another digital information which differs from said digital information.

10. (Original) The entertainment device as claimed in claim 8, wherein the digital information comprises plural kinds of application programs that can execute required functions, respectively, and wherein the management processor assigns any of the functions to the corresponding

component-processors, and reads the application program for executing the assigned function from the storage means, and executes the application program.

11. (Original) The entertainment device as claimed in claim 10, wherein each of the component-processors operates only for executing the application program for executing the function assigned to the component-processor until the management processor provides another demand to the component-processor.